

ANNUAL REPORT  
KANSAS EXPLORATIONS INCORPORATED  
1946

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Joplin, Missouri  
February 28, 1947

Mr. Andrew Fletcher,  
Executive Vice-President,  
Kansas Explorations, Inc.,  
250 Park Avenue,  
New York 17, New York

Dear Mr. Fletcher;

I transmit herewith Annual Report of  
the Kansas Explorations, Incorporated, for the  
year 1946.

Respectfully submitted,

*Ross Blake*

ANNUAL

REPORT

OF

KANSAS

EXPLORATIONS

INCORPORATED

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KANSAS EXPLORATIONS, INCORPORATED

YEAR 1946

The operations of the Kansas Explorations, Inc. were carried on continuously at the Jasper, and Buckingham Units throughout the year. The Ritz property operated until June 14, 1946, when the Mill, Hopper and Derrick were destroyed by fire. Ritz mining operations were resumed November 1, 1946 after the Derrick and Hopper had been replaced, the ore was treated by the Eagle Picher Mining and Smelting Co. at their Central Mill, under a special Milling Contract.

The base price of zinc concentrates remained at \$50.00 per ton from January 1, 1946, until November 10, 1946. Ceiling prices on Metals were removed at that time and the base price of zinc concentrates was increased to \$64.00 per ton. The base price of lead concentrates remained at \$76.01 per ton from January 1, 1946, until June 1, 1946. The Office of Price Administration increased the ceiling price on lead from 6.35 cents per pound East St. Louis to 8.10 cents which resulted in

an increase in the lead concentrate price to \$99.96 per ton. On July 1, the Metal price on lead was increased to 9.35 cents per pound and the price of lead concentrates was increased to \$117.96 per ton. Price Control automatically terminated June 30, 1946 but was again made effective July 26, and the lead price reverted back to 8.10 cents per pound of Metal and \$99.90 per ton of concentrates. Decontrol of lead prices as of November 1, 1946, resulted in a price of \$160.50 per ton at the close of the year.

The resulting price increases on concentrates however, were more than off set by reductions in Over-Quota Premiums resulting from the increase in Metal prices.

LIST OF LEASES AND TRACTS OWNED IN FEE  
AS OF DECEMBER 31, 1946

NUMBER	NAMEN	ACRES	STATE	LANDOWNERS ROYALTY
<u>RITZ UNIT</u>				
1012	Ritz	60	Oklahoma	12 $\frac{1}{2}$ %
<u>DARDENNE UNIT</u>				
974 $\frac{1}{2}$	Dardenne	40	Oklahoma	7 $\frac{1}{2}$ %
<u>JASPER UNIT</u>				
Owned in Fee	Jasper	310	Missouri	1% on 160 acres
<u>SNAPP UNIT</u>				
Owned in Fee	Snapp	55	Missouri	0
<u>BUCKINGHAM UNIT</u>				
977	Buckingham	140	Missouri	7 $\frac{1}{2}$ %
1001	Gibson, Etal	120	Missouri	7 $\frac{1}{2}$ %
1002	Robinson	10	Missouri	7 $\frac{1}{2}$ %
1009	Aylor	40	Missouri	7 $\frac{1}{2}$ %
1011	Boyd	80	Missouri	7 $\frac{1}{2}$ %
979	Cushman	80	Missouri	7 $\frac{1}{2}$ %
989	H. C. Weaver	60	Missouri	7 $\frac{1}{2}$ %
992	Weaver	60	Missouri	7 $\frac{1}{2}$ %
995	Gibson	160	Missouri	7 $\frac{1}{2}$ %
996	Gibson	152	Missouri	7 $\frac{1}{2}$ %
1010	Stella Boyd	53	Missouri	7 $\frac{1}{2}$ %
1013	Marsh	102	Missouri	7 $\frac{1}{2}$ %
	Total	1057		

Total acres 1522

RITZ            UNIT  
1946

The Ritz Lease is located in Ottawa County,  
Oklahoma, and contains 60 acres. It is operated  
under a  $12\frac{1}{2}\%$  royalty lease from the Indian Department,  
of the Department of the Interior.

RITZ UNIT  
1 9 4 6

The Ritz Unit was operated one 8-hour shift per day from January 1, until June 14, 1946, at which time all operations were suspended in the Mine and Mill until November 1, on account of the Hoisting Derrick and Hopper being destroyed by fire. During the period from January 1, to June 1, the Mine and Mill operated on a 48-hour weekly basis; From June 1, to June 14, they operated on a 40-hour weekly basis, and the 30-ton per hour concentrating plant operated 8 hours per day. The erection of a Derrick and Hopper was completed by November 1, at which time mining operations were resumed and were continued on a 5-day week basis until December 9, at which time they returned to operating on a 48-hour per week basis, the ore being Custom Milled by the Eagle Picher Mining and Smelting Co. at their Central Mill.

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At the Ritz Unit, during 1946, a total rock tonnage of 27,430 tons was hoisted, and a total of 22,230 tons of mine rock was treated in the concentrating plant prior to its being destroyed by fire. Also 5,084 rocks tons were Custom Milled by the

Eagle Picher Mining & Smelting Co., between November 1, December 31, 1946. From the total tonnage, 966.210 tons of zinc concentrates and 170.305 tons of lead concentrates were recovered. The entire tonnage of rock during 1946 yielded a recovery of 3.54% in the form of zinc concentrates and .62% in the form of lead concentrates or a total zinc and lead concentrate recovery of 4.16%. During the operating period, 6,980 man shifts were employed in operations. Each man shift averaging a production of 3.9 rock tons or the equivalent of .16 tons of zinc and lead concentrates. The total average operating cost was \$4.820 for each ton of rock or \$116.14 for each ton of zinc and lead concentrates recovered.

The Ritz property operated under the Over-Quota production plan established by the War Production Board and later administered by the Civilian Production Administration.

On December 31, 1945, the Ritz Unit had no concentrates in bins. During the year 1946, 966.210 tons of zinc concentrates and 170.305 tons of lead concentrates were sold. An average gross price per ton (2000 pounds) of \$52.35 for zinc concentrates and \$82.87 for lead concentrates was obtained, or an average of

\$56.93 per ton of zinc and lead concentrates. On December 31, 1946, this Unit had no concentrates in the bins.

Premiums for Over-Quota Production of zinc and lead concentrates for the year 1946 averaged \$81.10 per ton of zinc concentrates and \$66.21 per ton of lead concentrates or an average of \$78.87 per ton of zinc and lead concentrates.

The average gross amount received per ton of zinc and lead concentrates, including premiums for Over-Quota Production was \$135.80. The average royalty paid on zinc and lead concentrates sold and shipped was \$10.68 per ton.

During the year, \$7,969.50 was spent for operating development. This was an expenditure of \$.290 for each ton of rock mined and \$7.01 for each ton of concentrates recovered. During the year 2609 feet of surface churn drilling was completed. \$4,305.93 of the above amount was spent for churn drilling and developing an upper ore body located in the Northwestern part of the 60 acre Ritz Tract, where according to information, developed by this drilling we have developed approximately 2800 plus, tons of zinc and lead concentrates. This ore body occurs about 100 feet above the present mine level in this area.

It is planned to do some additional prospect drilling and drive a 100 feet raise from the present mine level into this newly developed ore body by having a Hoist on the surface and let a Hoisting Cable down one of the prospect drill holes and attach it to a platform on which the men will be hoisted from the old mine level up the raise as they advance it. \$3663.57 was spent for operating development, test hole drilling in the mine, driving drifts and inclines.

At the beginning of the year, the probable and possible ore reserve based on the Quotas allowed as of January 1, 1946 was 1000 tons of zinc and lead concentrates. At the close of the year, the proven and possible ore reserve on the Ritz Tract and on the area to the North of the Ritz where we have the promise of a lease onto which we have driven two headings which show good ore, based on quotas allowed as of December 31, 1946, was 5000 tons of zinc and lead concentrates. During the year 1,136.515 tons of zinc and lead concentrates were produced.

During 1946, the Ritz Unit operating expenditure for labor and liability insurance was \$80,787.61; for items other than labor was \$51,201.65 or a total of \$131,989.26.

The total operating mine profit, Joplin  
Office, for the year 1946 at the Ritz Unit was  
\$10,212.54 based on actual sales of concentrates  
sold and loaded during the year. Miscellaneous  
other income for the year was \$416.41.

RECORD OF OPERATING RESULTS AT THE RITZ MINE  
FOR THE YEARS 1945 AND 1946

	YEAR 1945	YEAR 1946
Tons Ore Milled	50891	27314
Tons Concentrates Produced:		
Zinc	1878.610	966.210
Lead	245.615	170.305
Total	2124.225	1136.515
% Mill Recovery:		
Zinc	3.69	3.54
Lead	.48	.62
Total	4.17	4.16
Operating Income:		
Sales Concentrates	\$122582.15	\$ 64699.33
Production Premiums	143966.80	89640.79
Total	266548.95	154340.12
Less - Royalty	23546.07	12138.32
Net Value of Production:		
Amount	243002.88	142201.80
Per Ton Rock	4.775	5.206
Per Ton Concentrates	114.40	125.12
Operating Costs:		
Amount	171235.72	131989.26
Per Ton Rock	3.365	4.832
Per Ton Concentrates	80.61	116.13
Mine Profit:		
Amount	71767.16	10212.54
Per Ton Rock	1.410	.374
Per Ton Concentrates	33.79	8.99
Miscellaneous Other Income:		
Amount	2689.51	416.41
Per Ton Rock	.053	.015
Per Ton Concentrates	1.26	.36
Total Operating Profit:		
Amount	74456.67	10628.95
Per Ton Rock	1.463	.389
Per Ton Concentrates	35.05	9.35

RITZ UNIT  
1 9 4 6

RECOMMENDATIONS FOR 1947

It is recommended that we complete the raise into the upper ore body recently developed in the North-western part of the Ritz Tract as soon as possible.

We have driven two headings to the North line of the Ritz Tract on to land on which the Eagle Picher Mining and Smelting Co. have a first lease. These ore faces indicate a grade of ore of about 6%, most of which is zinc.

The Eagle Picher Mining and Smelting Co. have promised us a sub-lease on the land and arrangements are now being made with the Indian Department to approve this sub-lease as soon as possible to enable us to have as much operating time before June 30, 1947 as possible.

We believe these two developments along with other operating development now being done in the mine will insure profitable operations at least during the first six months of 1947.

SNAPP            UNIT  
1 9 4 6

This unit consists of the Snapp fee of 55 acres, 15 acres having been acquired by purchase during 1945 for additional slime pond settling area.

The Snapp Mine was not operated during the year 1946 as all known ore reserves which could be mined at a profit had been exhausted during the year 1945. The Snapp Mill was operated continuously during the year, except for a temporary shut down of two weeks during July, - treating ores mined from the Buckingham, Robinson and Gibson Tracts. During the operating period, the concentrating plant operated 8 hours per day. The days of operation per week varied as to the time required to treat the tonnage mined. The Mill operated on a 48-hour week from January 1, to June 1, - operated on a 40-hour week from June 1, to December 9, and on a 48-hour week from December 9, until December 31, 1946.

Miscellaneous other income for the year 1946, was \$12,338.62, from the sale of equipment, refund on power lines and cash sale of tailings.

BUCKINGHAM                      UNIT  
1 9 4 6

This unit consists of the Buckingham Lease 977, Gibson Lease 1001, Robinson Lease 1002, Boyd Lease 1007, Cushman Lease 979, Gibson Lease 995, Gibson Lease 996, Boyd Lease 1010, Aylor Lease 1009, Weaver Leases 989 and 992, and Marsh Lease 1013 and contains a total of 1057 acres.

All ores produced during 1946 from this unit were mined from the Buckingham Lease 977 and the Gibson et al. Lease 1001 and Robinson Lease 1002, and were transported by truck to the Snapp Mill, a distance of about three miles, where these ores were milled.

These ores were commingled during mining and milling operations, the royalty being distributed to land owners in proportion to the tonnage mined from each tract, the same rate of royalty was paid on all leases on which mining was done.

Just prior to November 1, we completed arrangements with the Union for a bonus payment for all tonnage produced in excess of a base figure which represented an average tons per man shift for the four preceeding months. This arrangement proved successful in increasing production per man shift and reducing our cost per rock ton and per ton of concentrates.

BUCKINGHAM TRACT  
1 9 4 6

All the ore produced from the Buckingham, Gibson and Robinson leases were hoisted at #1 and #2 shafts on the Buckingham lease, and transported by truck, operating on contract basis, to the Snapp concentrating plant a distance of about three miles where the ore was milled.

The Buckingham Unit operated on a 48-hour week from January 1, to June 1, - from June 1, to December 9, on a 40-hour week, and from December 9, to December 31, on a 48-hour week.

During 1946, a total rock tonnage of 60,911 tons was hoisted and 60,879 tons were treated in the Snapp concentrating plant. From the tonnage treated, 2,043.760 tons of zinc concentrates and 349.625 tons of lead concentrates were recovered. The entire tonnage of rock treated during 1946 yielded a recovery of 3.36% in the form of zinc concentrates and .57% in the form of lead concentrates giving a combined recovery of 3.93%. Ores mined from the Buckingham Lease 977, Gibson Lease 1001 and the Robinson Lease 1002, were hoisted at the Buckingham Shafts and were commingled as the ores produced

from these leases were from the same ore body.

The concentrates produced were distributed to each tract in proportion to the rock tonnage mined.

There were 19,962 tons of ore hoisted from the Gibson Lease, from which was recovered 650.090 tons of zinc concentrates and 113.630 tons of lead concentrates.

There were 2524 rock tons hoisted from the Robinson Lease 1002 from which was produced 95.055 tons of zinc concentrates, and 15.220 tons of lead concentrates, and 38425 rock tons hoisted from the Buckingham Lease 977, from which was produced 1298.615 tons of zinc concentrates and 220.725 tons of lead concentrates.

During the operating period, 13,504 man shifts were employed in operations, each man shift avereging a production of 4.5 rock tons or the equivalent of .18 tons of zinc and lead concentrates. The average operating cost was \$4.313 for each ton of rock or \$108.11 for each ton of zinc and lead concentrates recovered.

The Buckingham Unit operated under the Over-Quota Production Premium Plan established by the War Production Board and later administered by the Civilian Production Administration.

On December 31, 1946, the Buckingham Unit had no concentrates in the bins, all of the production for

the year 1946 having been sold and loaded. During the year 2,043.760 tons of zinc concentrates and 349.625 tons of lead concentrates were sold and loaded from production from the Buckingham Unit. An average gross price per ton (2000 pounds) of \$52.35 for zinc concentrates and \$103.46 for lead concentrates was obtained or an average of \$59.81 per ton. Premiums received for Over-Quota Production from the Buckingham Unit for the year 1946 averaged \$74.45 per ton of zinc concentrates and \$91.02 per ton of lead concentrates or an average of \$76.74 per ton of concentrates. The average gross amount received per ton of concentrates including premiums for Over-Quota Production was \$136.55. The average royalty paid on zinc and lead concentrates sold and loaded was \$6.40 per ton, royalty being paid on gross sales and premiums received on the "A" Quota Production only.

During the year \$29,422.56 was spent at the Buckingham Unit for operating development and churn drilling. This was an expenditure of \$.484 for each ton of rock mined and \$12.29 for each ton of concentrates recovered. There was 13,550 feet of churn drilling done on the leases in the Buckingham Unit during the year.

At the beginning of the year, the estimated ore reserve on the leases in the Buckingham Unit, based

on the prices of concentrates and quota allowance as of January 1, 1946, was 1000 tons of possible zinc and lead concentrates. At the close of the year the estimated ore reserve on all leases in this unit based on price of concentrates and quota allowances as of December 31, 1946, was 1800 tons of possible zinc and lead concentrates.

During the year 1946 the operating expenditure for labor and liability insurance was \$151,190.70; for items other than labor and liability insurance was \$111,440.94 or a total of \$262,631.64. The total operating mine profit, Joplin Office, for the year 1946 was \$48,876.91 based on actual sales of concentrates sold and loaded during the year. Miscellaneous other income for the year was \$342.63.

BUCKINGHAM UNIT  
1946

RECOMMENDATIONS FOR 1947

It is recommended that a continuation of the present operating and prospect drilling program be continued until June 30, 1947, or as long thereafter as premium payments are received.

If it is possible to maintain the grade of ore and tonnage that has been mined during January, 1947 and the base price for zinc and lead concentrates do not decline from the December figure, it may be possible to continue operations after June 30, even if the premium payments are discontinued.

The January operating results show that we would have had a profit of more than \$10.00 per ton of concentrates if we had not received any premium payments.

RECORD OF OPERATING RESULTS AT THE BUCKINGHAM UNIT  
FOR THE YEARS 1945 AND 1946

	YEAR 1945	YEAR 1946
Tons Ore Milled	64915	60879
Tons Concentrates Produced:		
Zinc	2145.490	2043.760
Lead	338.980	349.625
Total	2484.470	2393.385
% Mill Recovery:		
Zinc	3.31	3.36
Lead	.52	.57
Total	3.83	3.93
Operating Income:		
Sales Concentrates	\$143500.97	\$143159.07
Production Premiums	129440.36	183665.81
Total	<u>272941.33</u>	<u>326824.88</u>
Less - Royalty	16522.01	15316.33
Net Value of Production:		
Amount	256419.32	311508.55
Per Ton Rock	3.950	5.117
Per Ton Concentrates	103.21	130.15
Operating Costs:		
Amount	227275.35	262631.64
Per Ton Rock	3.501	4.314
Per Ton Concentrates	91.48	109.73
Mine Profit:		
Amount	29143.97	48876.91
Per Ton Rock	.449	.803
Per Ton Concentrates	11.73	20.42
Miscellaneous Other Income:		
Amount	327.80	758.97
Per Ton Rock	.005	.012
Per Ton Concentrates	.13	.32
Total Operating Profit:		
Amount	29471.77	49635.88
Per Ton Rock	.454	.815
Per Ton Concentrates	11.86	20.74

JASPER            UNIT  
1946

The Jasper Tract is composed of 310 acres located in Jasper County, Missouri, about two miles West of Joplin, and is owned in fee. There is an outstanding royalty interest of 1% held by local parties on 160 acres of this tract. An additional 40 acre tract adjoining the original 270 acre Jasper Tract was purchased in November 1946,

During the early part of 1946, arrangements were made with the Union for a Bonus Payment to be made for all tonnage produced in excess of a base figure which represented an increased tonnage per man shift over what had been done in the past. This proved to be successful in increasing the tonnage to the Mill and in reducing the rock ton cost. After the Jumbo mounted drills were put into operation a revision was made in the base figures on which bonus payments had been paid, this also not only again increased our tons per man shift but also decreased our cost per rock ton. The bonus payments improved the absentee situation and man power shortage in the last half of the year

JASPER UNIT  
1 9 4 6

The Jasper Unit was operated continuously throughout the year 1946. During the operating period, the mine operated two 8-hour shifts and the mill operated three 8-hour shifts per day, and operated on a 48-hour week from January 1, to June 1, from June 1, to December 9, operations were on a 40-hour week, from December 9, to December 31, were on a 48-hour week.

On account of the low efficiency of the drilling crews it was decided to make a radical change in our drilling methods, and use the Jumbo Mounted Drills erected on Air Powered Catapillar Tractors, which were coming into use in the District. Two drills were mounted on each of the four Jumbos which were able to drill holes in headings which were 20 feet in height. We found the eight drills mounted on the Air Jumbos would produce as much broken ore as we had been getting from double the number of drills previously used, drilling from a vertical post and arm. All loading of the broken ore is done by motor driven 3-drum hoists operating heavy skip drags, through steel ramps mounted on motor driven catapillar tractors. Small

storage battery locomotives were used in placing the steel cans which are mounted on cars for loading. These cans loaded with broken ore are then taken to the hoisting shaft by larger main line storage battery locomotives where they are hoisted by two motor driven hoists operating in one shaft.

At the Jasper Unit during the year 1946, a total rock tonnage of 303,804 tons was hoisted and 303,829 tons of mine rock was treated in the concentrating plant. From the tonnage treated, 3938.935 tons of zinc concentrates and 1,527.490 tons of lead concentrates were produced. The entire tonnage of rock treated during the year yielded a recovery of 1.30% in the form of zinc concentrates and a .50% in the form of lead concentrates giving a combined recovery of 1.80%. During the operating period, 38,912 man shifts were employed in operations, each man shift averaging 7.8 rock tons or the equivalent of .14 tons of zinc and lead concentrates. The total average operating cost was \$2.273 for each ton of rock or \$126.36 for each ton of zinc and lead concentrates recovered.

The Jasper property operated under the Over-Quota Production Premium Plan during the year 1946.

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On December 31, 1945, the Jasper Unit had no concentrates in the bins. During the year 1946, 3,938.935 tons of zinc concentrates and 1,529.490 tons of lead concentrates were sold and loaded. An average gross price per ton (2000 Pounds) of \$54.70 for zinc concentrates and \$98.02 for lead concentrates was obtained, or an average of \$66.80 per ton. Premiums received for Over-Quota Production for the year 1946 averaged \$88.01 per ton of zinc concentrates and \$91.01 per ton of lead concentrates or an average of \$88.85 per ton. The average gross amount received per ton of concentrates including premiums for Over-Quota Production was \$155.65. The average royalty paid on zinc and lead concentrates sold and loaded was \$.66 per ton.

During the year, \$694.50 was spent for operating development. This was an expenditure of \$.002 for each ton of rock mined and \$.12 for each ton of concentrates recovered. There was 794 feet of churn drilling done at the Jasper Unit during the year. At the beginning of the year the estimated possible ore reserve at the Jasper Unit, based on the base price of concentrates and quota allowances as of January 1, 1946, was 16000 tons of possible zinc and lead concentrates. The estimated ore reserve, based on base price of concentrates and quota allowances as of December 31,

1946, was 13000 tons of possible zinc and lead concentrates. During the year 5,466.425 tons of zinc and lead concentrates were produced.

During 1946, at the Jasper Unit the operating expenditure for labor and liability insurance was \$429,302.78; for items other than labor and liability insurance was \$261,444.95 or a total of \$690,747.73.

The total operating mine profit for the year, Joplin Office, was \$156,496.56 based on concentrates sold and loaded during the year. Miscellaneous other income for the year 1946, was \$2,689.37. In addition to this amount \$7,406.71 was received from the sale of tailings produced from the milling of the Jasper Ore.

JASPER UNIT  
1946

RECOMMENDATIONS FOR 1947

It is recommended that operations be continued in 1947 as long as premium payments are received by the Kansas Explorations Incorporated and that the mechanization of the operations be continued as far as possible, keeping in mind the possible closing of all operations as of June 30, if premium payments are discontinued.

RECORD OF OPERATING RESULTS AT THE JASPER UNIT  
FOR THE YEARS 1945 AND 1946

	YEAR 1945	YEAR 1946
Tons Ore Milled	210897	303829
Tons Concentrates Produced:		
Zinc	2502.860	3938.935
Lead	1338.505	1527.490
Total	3841.365	5466.425
% Mill Recovery:		
Zinc	1.19	1.30
Lead	.63	.50
Total	1.82	1.80
Operating Income:		
Sales Concentrates	\$245965.65	\$365164.71
Production Premiums	338573.33	485666.47
Total	584538.98	850831.18
Less - Royalty	2459.66	3586.89
Net Value of Production:		
Amount	582079.32	847244.29
Per Ton Rock	2.760	2.788
Per Ton Concentrates	151.52	154.99
Operating Costs:		
Amount	511834.87	690747.73
Per Ton Rock	2.427	2.273
Per Ton Concentrates	133.24	126.36
Mine Profit:		
Amount	70244.45	156496.56
Per Ton Rock	.333	.515
Per Ton Concentrates	18.28	28.63
Miscellaneous Other Income:		
Amount	10605.28	10096.08
Per Ton Rock	.050	.033
Per Ton Concentrates	2.76	1.84
Total Operating Profit:		
Amount	80849.73	166592.64
Per Ton Rock	.383	.548
Per Ton Concentrates	21.04	30.47

DARDENNE UNIT  
1 9 4 6

The Beck Mining and Royalty Company,  
who has a sub-lease on this 40-acre tract, did  
not operate the property during the year 1946.  
The expenditure on this lease for the year was  
\$35.28.

# GENERAL

During the year 1946, production was maintained from the Ritz, Jasper and Buckingham Units.

Ritz - operated continuously from January 1, until June 14, when the Mill, Hoisting Derrick and Transformer House was destroyed by fire, all of which was covered by insurance. The hoisting derrick, hopper and transformer house were replaced and mining operations were resumed November 1,. The mine ore was treated at the Central Mill of the Eagle Picher Mining and Smelting Co. under a special milling contract.

Jasper - Operated continuously throughout the year. The grade of ore milled gave a combined mill recovery of zinc and lead concentrates of about 1.80%. Due to the mechanization of the drilling, loading and haulage, and the payment of a bonus for increased tonnage production, we were enabled to make a material increase in the tons of ore mined during the year, all of which increased the production of tons of ore per man shift and reduced the rock ton cost.

During the latter part of the year we were forced to build an extension on to our tailing conveyor,

as we were unable to load and ship only a small amount of the tailings produced on account of freezing weather.

Snapp Mill - Operated throughout the year and treated ores produced from the Buckingham, Gibson and Robinson Tracts, the ore being hoisted through shafts located on the Buckingham land. The ore faces continued to be low and narrow throughout most of the year which caused a lower output of tons per man shift.

During the latter part of the year a bonus system providing for the payment of a bonus for production over a base tonnage was inaugurated, which proved very successful in increasing the tons per man shift and total tons mined.

The following data shows comparable cost and production figures of the Ritz, Jasper, Snapp and Buckingham yearly operations. Also some comparable figures are shown between cost data compiled by the Tri-State Zinc and Lead Ore Producers Association and that of the Kansas Explorations, Incorporated.

OPERATIONS FOR YEAR 1946

	RITZ UNIT	SNAPP UNIT	BUCKINGHAM UNIT	JASPER UNIT	TOTAL
Tons Ore Milled	27314	0	60879	303829	392022
Tons Concentrates Produced:					
Zinc	966.210	0	2043.760	3938.935	6948.905
Lead	170.305	0	349.625	1527.490	2047.420
Total	1136.515	0	2393.385	5466.425	8996.325
% Mill Recovery:					
Zinc	3.54	0	3.36	1.30	1.77
Lead	.62	0	.57	.50	.52
Total	4.16	0	3.93	1.80	2.29
Operating Income:					
Sales of Concentrates	\$64699.33	0	\$143159.07	\$365164.71	\$573023.11
Production Premiums	89640.79	0	183665.81	485666.47	758973.07
Total	154340.12	0	326824.88	850831.18	1331996.18
Less - Royalty	12138.32	0	15316.33	3586.89	31041.54
Net Value of Production:					
Amount	142201.80	0	311508.55	847244.29	1300954.64
Per Ton Rock	5.206	0	5.117	2.788	3.319
Per Ton Concentrates	125.12	0	130.15	154.99	144.61
Operating Costs:					
Amount	131989.26	0	262631.64	690747.73	1085368.63
Per Ton Rock	4.832	0	4.314	2.273	2.769
Per Ton Concentrates	116.13	0	109.73	126.36	120.65
Mine Profit:					
Amount	10212.54	0	48876.91	156496.56	215586.01
Per Ton Rock	.374	0	.803	.515	.550
Per Ton Concentrates	8.99	0	20.42	28.63	23.96
Miscellaneous Other Income	416.41	12338.62	758.97	10096.08	23610.08
Total Operating Profit	10628.95	12338.62	49635.88	166592.64	239196.09

KANSAS EXPLORATIONS INC.  
JOPLIN MISSOURI

Comparison of Kansas Explorations, Inc. Operations  
and District Operations for the Year, 1946.

	District Per Rock Ton	Kansas Ex. Per Rock Ton	Ritz Per Rock Ton	Buckingham Per Rock Ton	Jasper Per Rock Ton	District Mill Recoveries by Months - 1946	
Labor	\$1.3594	\$1.487	\$2.523	\$2.143	\$1.262	January	3.340%
Supplies	.6195	.484	.697	.461	.470	February	3.420%
Liability Insurance	.0882	.097	.215	.137	.078	March	3.320%
Explosives	.1230	.144	.102	.137	.149	April	3.150%
Development	.0478	.099	.313	.483	.002	May	3.104%
Power	.2160	.200	.330	.480	.132	June	2.979%
Insurance	.0095	.002	.004	.003	.001	July	3.294%
Superintendence	.1499	.072	.064	.072	.072	August	3.135%
Taxes	.0381	.065	.094	.109	.054	September	3.202%
Miscellaneous	.2097	.118	.470	.286	.053	October	2.994%
Total	\$2.8611	\$2.768	\$4.812	\$4.312	\$2.273	November	2.962%
						December	2.819%
Mining	\$1.8169	\$1.907	\$3.028	\$2.897	\$1.605	Year 1946	3.187%
Milling	.4573	.379	.962	.534	.295	Year 1945	3.462%
Power	.2319	.200	.334	.486	.132		
General	.3550	.282	.488	.395	.241		
Total	\$2.8611	\$2.768	\$4.812	\$4.312	\$2.273		
Tons Rock Per Man Shift	5.879	6.600	3.900	4.500	7.800		
Tons Conc. Per Man Shift	.187	.150	.160	.180	.140		
Average % Mill Recovery:							
Zinc	2.774	1.77	3.54	3.36	1.30		
Lead	.443	.52	.62	.57	.50		
Total	3.187	2.29	4.16	3.93	1.80		

EMPLOYER'S LIABILITY INSURANCE

EMPLOYERS      LIABILITY  
1946

During the year 1946, the Kansas Explorations, Inc., carried its own Liability Insurance. A total of 38 lost time accidents occurred during the year making a total of 563 shifts lost, averaging 14.8 shifts lost per accident and 9.5 shifts lost per 1000 man shifts worked.

The following table shows results of operating as self-insurer during the year 1946:

Credited to Reserve during 1946		\$38112.04
Cost of 1946 Accidents	\$23050.77	
Plus estimated Liability on unsettled 1946 cases as at 12/31/46	<u>9320.00</u>	<u>32370.77</u>
Indicated Profit as Self-Insurer for year 1946		\$ 5741.27
1946 Cost of injuries occurring prior to 1946		\$27597.04
Estimated Liability on unsettled cases which occurred prior to 1946		\$10000.00
Total expended from Reserve Account during 1946:		
For 1946 Injuries		\$13555.33
For Injuries Prior to 1946		27597.04
For Occupational disease cases		<u>9495.44</u>
Total		<u>\$50647.81</u>
Balance in Reserve Account at 12/31/46		\$33467.22
Balance in Reserve Account at 12/31/45		<u>46002.99</u>
Decrease in Balance		\$12535.77

If only 1946 accidents are considered, the shifts lost per 1000 shifts worked was 9.5, but considering shifts

lost from 1946 accidents and shifts lost from  
prior accidents together the shifts lost per  
1000 shifts worked was 18.44. The total shifts  
lost during 1946 account of injuries was 1095.

LEGAL

LAW SUITS  
1 9 4 6

During the year 1946, seven suits were filed in the local district courts of Jasper County, Missouri, by former employees for alleged injury to their health while employed by the Company. Two of these suits have been settled out of court at a total cost of \$1,150.00 and nine suits are now pending. Also four claims were settled for \$11,500.00 without suit having been filed.

Also suits for "Portal to Portal" pay were filed by 125 employees and former employees asking for \$1,125,000.00 in wages plus punitive damages of like amount. No action has been taken in these suits.

It is estimated that the occupational disease cases outstanding at the close of the year have a liability of approximately \$5000.00.

## GENERAL EXPENDITURES

1946

	AMOUNT	PERCENT OF TOTAL
Lease Rentals	\$ 1140.00	.10
Capital Expenditures	0.	0.
Total	<u>\$ 1140.00</u>	<u>.10</u>
Mining and Milling Costs	\$1085403.91	97.12
Royalties	31041.84	2.78
GRAND TOTAL	<u>\$1117585.75</u>	<u>100.00</u>

CURRENT ASSETS AND CURRENT LIABILITIES  
December 31, 1946

At the close of the year 1946, Current Assets  
were as follows:

Customers' Accounts Receivable:		
American Zinc, Lead & Smelting Co.	\$32150.42	
Eagle Picher Mining & Smelting Co.	5805.67	
Metals Reserve Company	<u>114823.33</u>	
Total		\$152779.42
Customers' Accounts Receivable - Miscellaneous:		
Harry J. Abbey Company		257.03
Other Accounts Receivable:		
Supt. Quapaw Indian Agency	6.84	
Verna Wilson, etal	.14	
Henry Hoffman	.07	
Eagle Picher Mining & Smelting Co.	<u>71.21</u>	
Total		78.26
Warehouse Stock - Snapp		
	777.64	
Warehouse Stock - Jasper		
	10339.86	
Sheepranch Warehouse Stock - Snapp		
	1850.46	
Sheepranch Warehouse Stock - Jasper		
	3445.64	
"Block F" Warehouse Stock - Shapp		
	2335.63	
"Block P" Warehouse Stock - Jasper		
	<u>1262.72</u>	
Total Stocks		20011.95
Total Current Assets		

At the close of the Year 1946, Current Liabilities  
were as follows:

Accrued Accounts Payable	7691.66	
Vouchers Payable	30610.99	
Unpresented Treasury Drafts	3352.59	
Unpresented Salary Drafts	3235.06	
Unpresented Payroll Drafts	24363.57	
Income Tax Withheld from Employees Wages	4209.70	
State Compensating Tax Payable	.41	
Accrued Wages	3431.70	
Unclaimed Wages	1126.80	
Accrued Unemployment Insurance Taxes	4198.24	
Accrued and Collected Old Age Benefit Taxes	2833.94	
Accrued Taxes	130.62	
Accrued Royalties	3657.95	
Accrued Charges on Premiums as Self-Insurer	<u>644.01</u>	
Total Current Liabilities		\$ 89487.24

**MISCELLANEOUS INCOME**  
**1946**

Income for the Year 1946, other than from  
Concentrate Sales, consisted of the following:

Discount on Purchases - Ritz	\$ 139.22
Discount on Purchases - Buckingham	200.86
Discount on Purchases - Gibson	111.84
Discount on Purchases - Robinson	11.12
Discount on Purchases - Jasper	1636.84
Miscellaneous Other Income - Joplin Office	76.82
Miscellaneous Other Income - Ritz	275.00
Miscellaneous Other Income - Snapp	12338.62
Miscellaneous Other Income - Buckingham	4.93
Miscellaneous Other Income - Gibson	4.07
Miscellaneous Other Income - Jasper	987.71
Income from Sale of Tailings - Jasper	<u>7406.71</u>

Total

**\$23193.74**